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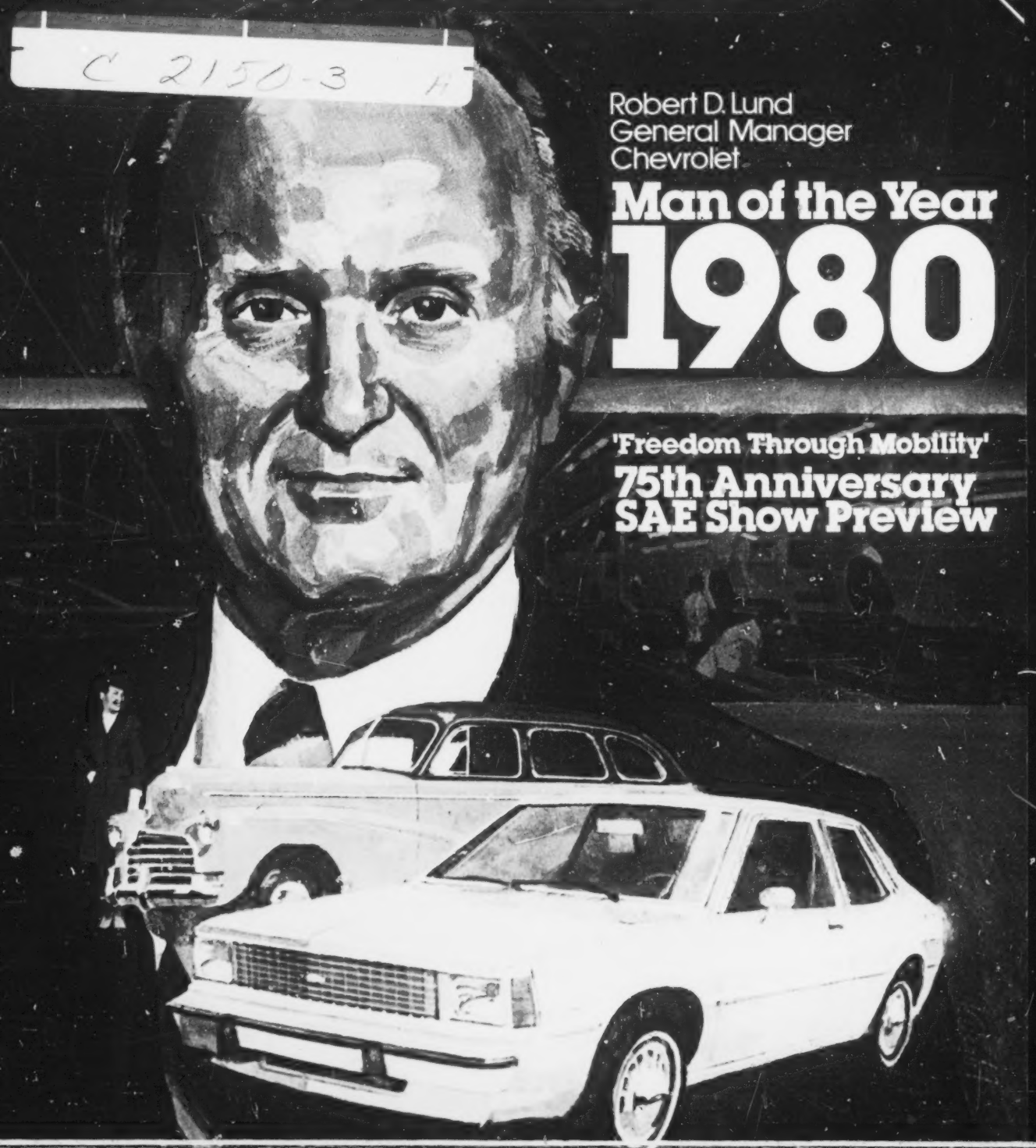

Robert D. Lund
General Manager
Chevrolet

Man of the Year 1980

'Freedom Through Mobility'

75th Anniversary SAE Show Preview

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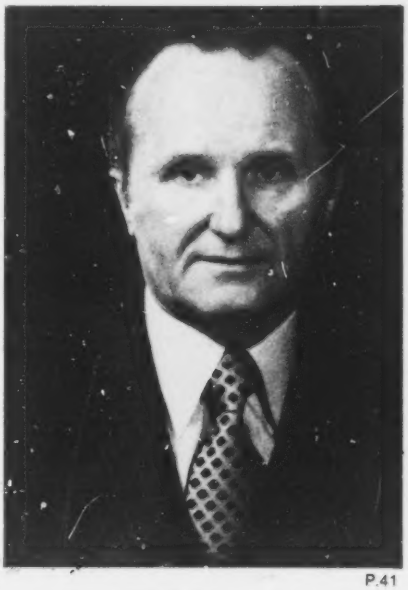
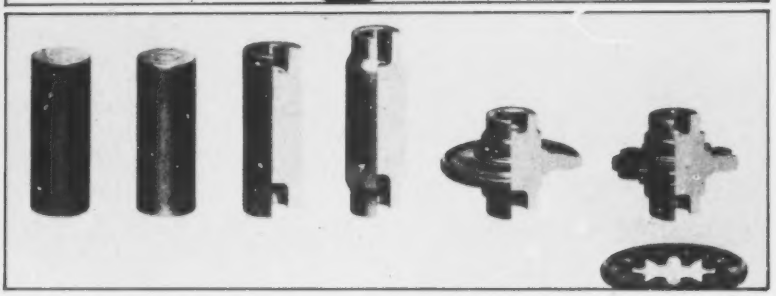


P.41

P.23



P.68

FEATURES

41 Detroit's 'Eager Beaver' Steers Chevrolet's Future
Robert D. Lund, *AI*'s 1980 Man Of The Year, is confident that a little 'strain and pain' will bring future growth and prosperity to the domestic auto industry.

55 Detroit After Hours
In town for the SAE Show? This section gives you some helpful pointers on extra-curricular activities.

62 75th Anniversary SAE Show Preview
The 1980 Society of Automotive Engineers Congress & Exposition features a record number of technical sessions and exhibitors. This preview highlights the society's Diamond Jubilee event.

68 Metal Forming Gains Ground In Europe
European metal forming machine designers are aiming at shrinking batch sizes and opening up a wider market.

74 The Volvo Way
Volvo of Canada is interested in producing the same quality cars that its mother plant in Sweden makes, even if it moves at a much slower rate than Detroit.

85 Industry Indulges In Electronics Explosion
The automotive electronics industry has seen explosive growth, yet future possibilities still seem countless.

91 Behind The Iron Curtain: Vehicle Production Rises
Eastern Europe plans a 36% increase in production despite shortages of funds and diminishing crude oil supplies.

NEWS

7 Editorial: Recession? What Recession!
8 Letters: Tirade & Trivia
10 Detroit: There's No Future Without Energy Action
14 Washington: Tinkering With The Mileage Tests
16 Performance: Ion Propulsion—Future Powerplants?
18 Auto/Pulse Int'l.: Crunch Time For European Truck Builders

Automotive News/Analysis
23 Four Imports Introduce '80 Models
25 AI Editor Joins Export Council
25 Lucas/Ducellier Deal Goes Ahead
27 GM Device Cleans Up Coal
29 Used Machinery Allowance Adjusted
29 AC Inverter Cuts Costs
31 Hercules Plans Tubing Plant
31 Armstrong Buys French Company
33 Advanced Turbine Slated For 1985
35 News in Brief

abc

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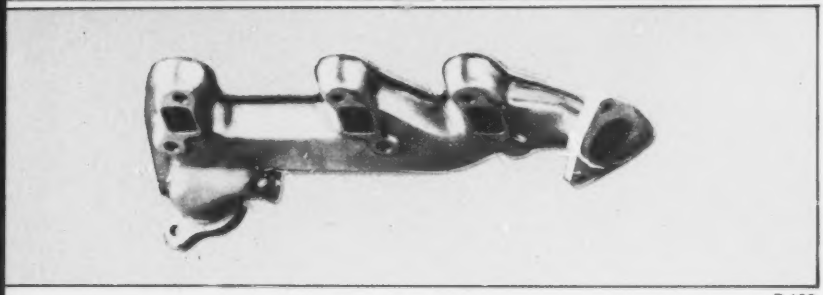
P.91

P.62



P.100

DEPARTMENTS

97 Materials: Plastics Go Under The Hood
100 Components: Steel Manifolds Cut Weight And Cost
108 Production: Spinning Wheels Must Go Round
114 Truck & Off-Highway: Leg Support System Saves Labor
118 Electronics: Outlook Positive For PTC Thermistors
122 Movers & Shakers
124 New Products Showcase
142 Technical Literature
156 Business Staff/Ad Index
157 Reader Information Cards

INTERNATIONAL

I- 5 Computerized Welding Boosts Productivity
I-10 Flexibility Simplifies Machining Centers
I-12 British Truck Adapts For its Use

COVER

Chevrolet's Robert D. Lund, with a heavy reputation as one of the Motor City's all-time great marketers, appears as *Automotive Industries'* 1980 Man Of The Year.

NEXT MONTH

Our March Designers' Handbook features articles on digital dashboard displays, what's new in suspensions, the future of mechanical fasteners and a close-up look at what may be the transmission breakthrough of the decade.

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BEHIND THE IRON CURTAIN: VEHICLE PRODUCTION RISES

by Joseph M. Callahan

Eastern Europe plans a 36% increase in production despite shortages of funds and diminishing crude oil supplies. East-West trade could increase; but will the West be wary of helping small-car market competitors?

Eastern European automobile, truck and bus manufacturers will boost their vehicle production 36% from 1978 to 1985, raising it from 3.3 million units in 1978 to 4.5 million vehicles in the next seven years, according to sources inside and outside the Iron Curtain. Total output in these countries now amounts to about a quarter of the production in the U.S.

While it would be expected that the industry-oriented Communist bloc nations (Russia, E. Germany, Poland, Czechoslovakia, Hungary and Romania) would put the greatest emphasis on trucks in their next five-year plan which begins in 1980, they're actually increasing car output 39% while raising truck production only 30%.

Car registrations are expected to go from 2.3 million in 1978 to 3.2 million in 1985. Truck registrations will rise from one million last year to 1.3 million by 1985.

These and the following projections came from reliable sources who do not want to be identified. While they are "projections," they may have more validity than many Western sales predictions because they have been more or less mandated by Moscow rather than dictated by the more whimsical vehicle markets of the Free World.

The figures mentioned in this article refer to all the countries listed above, as well as Yugoslavia, which does not belong to the Russian-controlled Council for Mutual Economic Assistance (Comecon).

The motor vehicle market in Eastern Europe is dictated by Five Year State Plans which decree the models and the volumes that are to be produced. While providing a stable market, such control restricts the industry from responding to changes in customer tastes and demands. This state planning also results in three-to-eight-year waiting lists for cars and reportedly causes dissatisfaction with the outdated models.

Trucks for Eastern Europe are designed to meet arduous operating conditions and to compensate for the lack of widespread service. As a result, Eastern European trucks are often over-engineered. But this also provides opportunities for sales in the Third World where similar conditions exist. A fully-qualified driver in these countries is also part mechanic.

To flesh out the story of the slowly burgeoning Eastern European auto and truck industry, I recently spent 11 days driving unescorted and without restriction through 3500 miles of Poland, Czechoslovakia, Hungary and Romania.

The growth of the auto, truck and bus industries in Eastern Europe undoubtedly will provide some opportunities for suppliers and possibly vehicle makers in Western Europe and the U.S. On the other hand, these opportunities will be limited by: (1) the Leninist-Marxist philosophy of these countries which dictates self-sufficiency whenever possible; (2) a shortage of funds and especially hard currency; and (3) the Soviet Bloc's slowly declining supply of crude oil which makes impractical any huge increase in motor vehicle production.

Another obstacle to East-West trade in motor vehicles is the Communist dedication to industrial products, such as machine tools, which will eventually be used to produce consumer goods. In addition, while these countries have excellent two-lane primary and secondary roads, they don't have the freeways to handle much greater vehicle traffic.

Slightly countering these strong forces is the increasing Communist

Eastern Europe

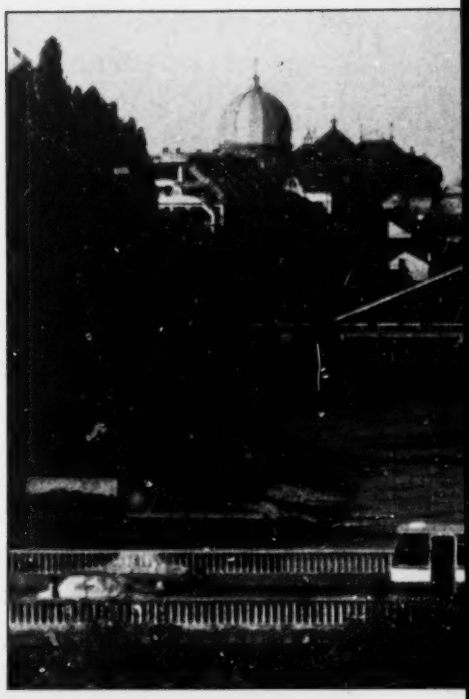
experimentation with free enterprise in Hungary and other Eastern European areas and the growing demand from people behind the Iron Curtain for more consumer products and a higher standard of living. This could mean more automobiles and more products delivered by trucks. But putting too great a reliance on these factors would be to contradict the current realities.

Despite the lack of hard currency in Eastern Europe and the other obstacles, there appears to be a near obsession among many Western companies and Eastern governments to substantially expand their automotive trade.

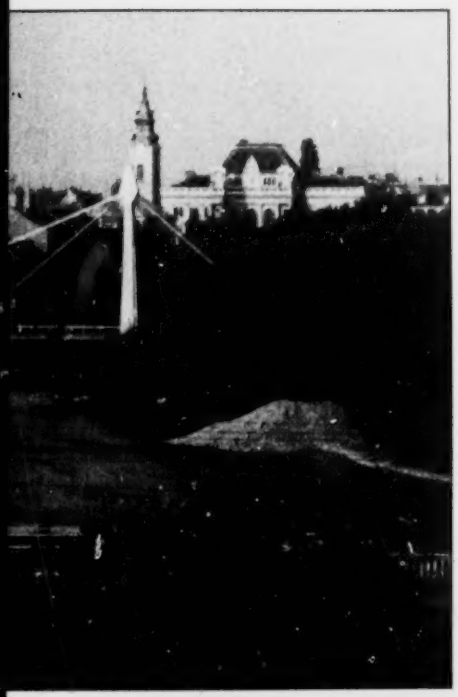
Ford Motor Co. and General Motors now have staffs probing the markets and the governments of Eastern Europe, confident that one day in the not-too-distant future there will be much greater East-West trade.

With this goal firmly in mind, both Ford and GM have established trading companies whose primary function is to set up barter arrangements in these Eastern countries and elsewhere. They will be accepting almost any marketable product in exchange for their cars, trucks or non-vehicular products.

Fiat of Italy is the one major au-



Below: Tricycles run along the streets of center city Zako Pane, Poland. Four-wheel cars and trucks are not allowed in the center of the town.



Left: From a bridge in Romania the city of Oredea can be seen. It is 20 miles from the border of Romania and Hungary.

tomaker which has been willing to do business with the Eastern Europeans on their terms. This has resulted in Fiat largely building and equipping the "turn-key" auto plants in Russia and Poland and then turning them over to the Communists. Fiat also partially owns a Yugoslavian auto plant.

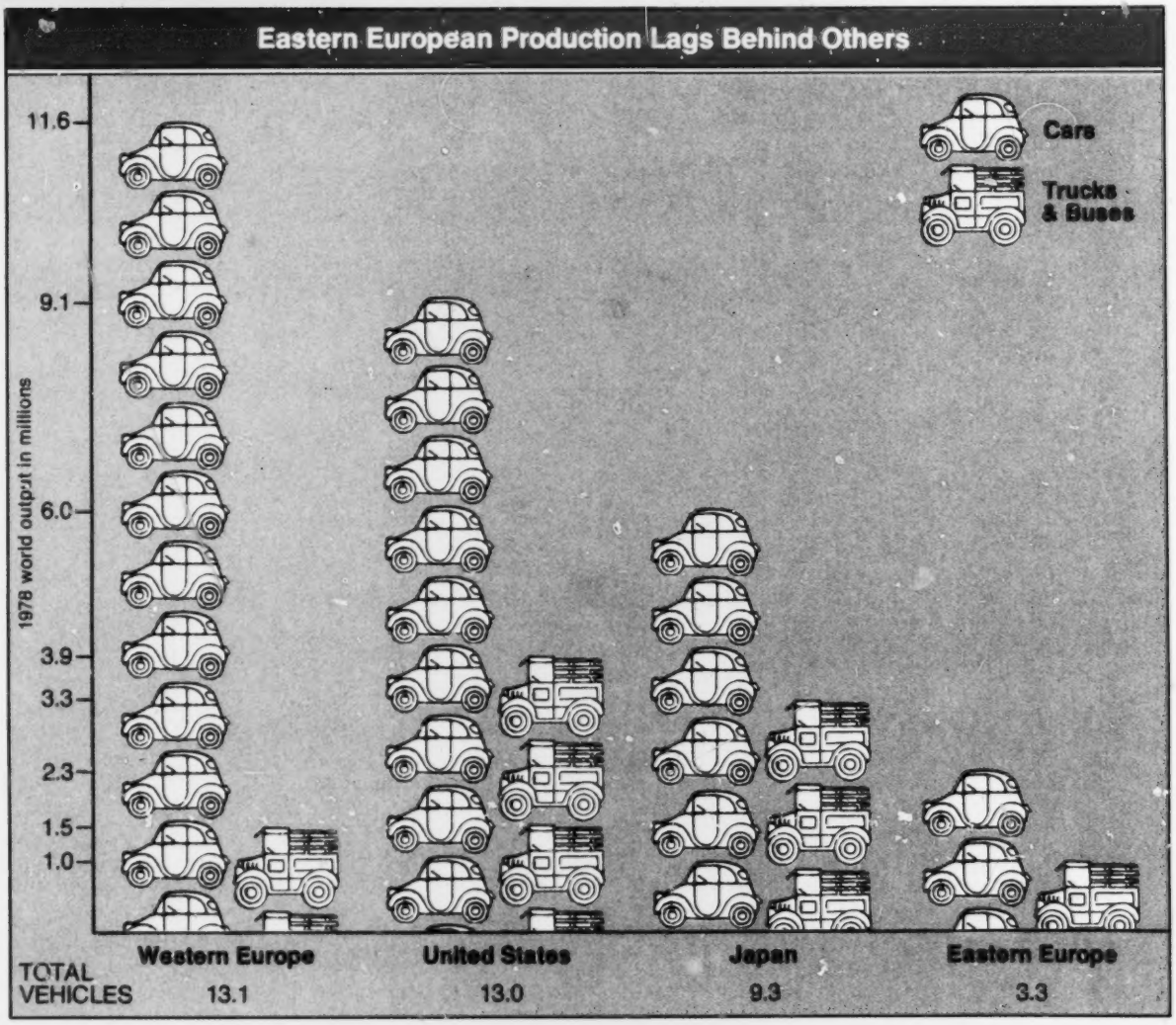
Last year top Russian transportation officials visited the headquarters of GM and Ford in Detroit and undoubtedly the other top auto manufacturers of the world to try to persuade them to establish similar turn-key operations in Eastern Europe.

But the Westerners, aware that their technology is one of their greatest assets, have refused the proposals. Obviously, they see no sense in establishing more competitors in Eastern Europe who one day might flood Free World markets with small, inexpensive cars.

Industry sources report that in 1978, Eastern European manufacturers exported 225,000 cars, trucks and buses to Western Europe and Third World countries, while importing 82,000 vehicles.

The exports represented 6.8% of the 3.3 million vehicles built or assembled in Eastern Europe in 1978. A large percentage of these were the Russian-built Lada which is similar to the Fiat 124.

To support these increasing sales to the West, the Eastern nations are expanding their dealer organizations to provide sales, service and parts. Avtoexport, the Russian state export agency, now partially owns distributorships in Finland, Sweden, Norway, Belgium, Nigeria and



If It's Tuesday, This Must Be Szekszard

Roaming around Communist-controlled Eastern Europe by car without an escort was an exciting, eye-opening adventure. But the 11-day tour was also risky and nerve-wracking on occasion.

Particularly surprising about this 3500-mile drive around and through Czechoslovakia, Poland, Hungary and Romania was that we were permitted complete freedom to travel where we would. (Also along on the trip were my wife, Halina, and two friends.) And except for military installations and railroads, we were allowed to photograph anything. However, incredibly heavy pollution in many cities and even in rural areas often interfered with photography.

In prowling around the highways and back roads that led to hundreds of villages, small towns and large cities, and talking with scores of people in the streets, restaurants and hotels, we heard very few complaints or saw any signs of fear or oppression. But there was endless red tape for both the natives and the tourists.

Probably the most disturbing part of the trip were the seven border crossings and the consequent confrontations with the military-oriented customs officers. Border crossings usually took two hours, although once the customs ritual took an entire evening.

In Poland and Czechoslovakia, border officials made incredibly detailed examinations of our finances on entering and leaving the countries, apparently in an all-out effort to ferret out black-market money operators. The U.S. dollar, the German mark and the British pound are all highly regarded as "hard currencies" in these countries. We were both openly and covertly approached by scores of people who offered up to five times the official rate of exchange in Polish zlotys, Czech corronas, Hungarian forints and Romanian leis for U.S. dollars.

Shortly after entering Poland and again just before leaving the country, we encountered a very capitalist creation—the speed trap. Our car was abruptly and unfairly flagged down and we were fined 1000 zlotys or $33 per ticket.

Speed limits in the four countries were generally about 55 mph (88 km/h) on the highway and 18 to 30 mph (29 to 48 km/h) in the cities. While the automobile population in these countries is not great, traffic often moves at only 35 or 40 mph (56 or 64 km/h) because of the heavy truck and even horse-cart traffic.

Horse-drawn carts are still widely used in Poland and, to some extent, in the other countries. These picturesque rubber-tired wagons, loaded with sugar beets, corn, logs or just people, were common in all the rural areas, as well as in many cities. And they have just as much right-of-way on the highway as the largest vehicles.

Buying gasoline or diesel oil often took some doing. Most of the countries required tourists to buy fuel coupons at the border or at a government office along the way. Frequently, tourists had to pay more than the natives. For example, in Hungary we paid $2 a gallon for diesel fuel with the coupons, while the natives only paid 80¢ a gallon in cash. Gasoline prices ranged from $1.80 to $2.80 a gallon. Most of the crude oil in these countries comes from Russia, providing the Kremlin with a strong leash on its satellites.

Gas stations were generally few and far between. Often, they were off the beaten path, and it took a bit of planning and searching to get refueled. The general attitude about the grubby-looking gas stations seemed to be, "When you need fuel bad enough, you'll find us."

With the exception of a few overworked filling station attendants and grocery clerks, the Eastern European people were very friendly, polite and helpful. They were even friendlier when we were identified as Americans. Our Mercedes suggested to many people that we were German, often bringing a surprising display of hostility. We soon found it worthwhile to carry window cards saying "U.S.A. Citizens."

Unquestionably, the people residing in these Soviet-controlled countries are restricted in terms of information available, in their jobs, their mobility, their education and in many other ways. On the other hand, we saw no one in trouble during our rapid passage and most people were doing better than we expected. An important fact is that despite the Russian domination, they've had 35 years of stability and peace—a rarity in their history.—*JMC*

Horse-drawn carts are still widely used in Poland, and to some extent in other countries. Consequently, traveling by car is often slow.

Eastern Europe Forecasts A 36% Vehicle Production Increase By 1985

(Add 000s)

	RUSSIA		POLAND		CZECH.		YUGOSLAVIA		E. GERMANY		ROMANIA	
	1978	1985	1978	1985	1978	1985	1978	1985	1978	1985	1978	1985
	1300	1500	340	490	175	375	252	440	167	250	68	200
	800	955	77	115	43	70	28	30	37	38	46	50
TOTAL VEHICLES	2100	2455	417	605	218	445	280	470	204	288	114	250

Eastern Europe

Cameroun. Independent Avtoexport distributors also are operating in Austria, Denmark, West Germany, Great Britain and Greece.

Poland is also exporting moderate volumes of the Polski-Fiat 125p and 126p, while Czechoslovakia is exporting the Skoda Estelle. Most auto exports from Eastern Europe go to Western nations, while the majority of the exported trucks go to Third World countries.

A weakness of the five-year plans imposed by the Russians on their satellites is that they produce rather old-fashioned and technically-backward cars. But the Eastern European countries often handle this problem by shipping their older models to their Socialist brother nations who are equally starved for cars.

Last year, Italy and Poland announced a unique 10-year auto trade agreement. To permit each manufacturer to concentrate on large volumes of a single car, Fiat of Italy will trade one-for-one the parts needed to assemble a new car called the Zero for fully-assembled units of the Polski-Fiat 126 which are being built by Poland's state auto company.

The accompanying charts give a rundown of auto production in each of the Eastern Bloc countries. In many cases, however, "production" consists of the assembly of knocked-down cars. ■

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Joe Callahan is standing in front of the Wedding Cake Building in Warsaw, Poland. The building was constructed after the Soviet takeover. Behind him is a Polski-Fiat, a car built by Poland's state auto company.

Eastern Europe Registered A Total 16,887 Vehicles In 1977

	Cars (Add 000s)	Trucks & Buses (Add 000s)	Total Vehicles (Add 000s)	Population Per Vehicle	% Cars	% Trucks
RUSSIA	3000	4500	7500	85.9	28	72
EAST GERMANY	2052	548	2600	8.2	19	9
YUGOSLAVIA	1732	152	1884	12.4	16	2
CZECHOSLOVAKIA	1677	300	1977	8.9	16	5
POLAND	1290	467	1757	26.6	12	8
HUNGARY	737	132	869	14.4	7	2
ROMANIA	200	100	300	107.3	2	2
TOTAL VEHICLES	10,688	6199	16,887	35.4	100	100

NOTE

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Cover 1, 2-3,

23-25, 61-67,

70-78, 85-89,

101, 105-120,

123-124, 132-

142.